

KGiSL INSTITUTE OF TECHNOLOGY: COIMBATORE – 641 035
REGULATIONS 2024 (for students admitted from AY2024-25)
CHOICE BASED CREDIT SYSTEM
B.E. COMPUTER SCIENCE AND ENGINEERING
CURRICULUM FOR SEMESTERS I -VIII

OVERVIEW OF CREDITS

Semester	HSMC	BSC	ESC	PCC	PEC	OEC	EEC	Total
I	4	10	9					23
II	4	9	9				3	25
III		4	4	16			2	26
IV		4		16			6	26
V	2			12	6		3	23
VI				6	9	3	4	22
VII	2			3		3	6	14
VIII							10	10
Total	12	27	22	53	15	6	34	169
% of Category	7.1%	16%	13%	31.4%	8.9%	3.6%	20.1%	100%

CATEGORY OF COURSES

HSMC	Humanities Science and Management Course	PEC	Professional Elective Course
BSC	Basic Science Course	OEC	Open Elective Course
ESC	Engineering Science Course	EEC	Employability Enhancement Course
PCC	Professional Core Course	MC	Mandatory Course

TYPE OF COURSES

LIT	Laboratory Integrated Theory	PCD	Personality Character Development
T	Theory	VC	Value Added Course
L	Laboratory Course	COT	Community Outreach and Intervention through Technical Activities
IP	Induction Programme	IT	Industrial Training/ Internship
MC	Mandatory Course	CC	Comprehension Course
NCC	NCC Credit Course	PW	Project Work

CREDIT ALLOCATION

S.No.	Category	Suggested Breakup of Credits	Credits
1	Humanities, Social Sciences and Management Courses (HSMC)	10-13	12
2	Basic Science Courses (BSC)	23 – 27	27
3	Engineering Science Courses (ESC)	18 - 22	22
4	Professional Core Courses (PCC)	50-62	53
5	Professional Elective Courses (PEC)	15-18	15
6	Open Elective Courses(OEC)	6	6
7	Employability Enhancement Courses(EEC)	30-36	34
8	Mandatory Courses (MC)	Non Credit	Non Credit
	Total	165 - 170	169

Semester – I							
S.NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UTA161	தமிழர் மரபு / Heritage of Tamils	T	1-0-0	1	1	HSMC
2	24UEN171	Communicative English for Engineers and Professionals - I	LIT	2-0-2	4	3	HSMC
3	24UMA161	Calculus and Matrix Algebra	T	3-1-0	4	4	BSC
4	24UPY171	Physics for Engineering and Technology	LIT	2-0-2	4	3	BSC
5	24UCH171	Engineering Chemistry	LIT	2-0-2	4	3	BSC
6	24UCS161	Computational Thinking	T	2-1-0	3	3	ESC
7	24UCS171	Python Programming	LIT	3-0-2	5	4	ESC
8	24UME166	Engineering Graphics	L	0-0-4	4	2	ESC
9	24UPD191	Personality and Character Development	PCD	-	2	-	EEC
10	24UIP181	Induction Programme	IP	-	-	-	MC
11	24UMC001	Mandatory Course I - Yoga and Meditation Fundamentals	MC	1-0-0	1	-	MC
Total Credits						23	

Semester – II							
S.NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UTA261	தமிழரும் தொழில் நுட்பமும்/ Tamils and Technology	T	1-0-0	1	1	HSMC
2	24UEN271	Communicative English for Engineers and Professionals - II	LIT	2-0-2	4	3	HSMC
3	24UMA261	Statistics and Numerical Methods	T	3-1-0	4	4	BSC
4	24UPY261	Physics for Information Science	T	3-0-0	3	3	BSC
5	24UCH261	Environmental Sciences and Sustainability	T	2-0-0	2	2	BSC
6	24UCS271	Programming in C	LIT	3-0-2	5	4	ESC
7	24UEC272	Basic Electrical and Electronics Engineering	LIT	2-0-2	4	3	ESC
8	24UME266	Engineering Practices Laboratory	L	0-0-4	4	2	ESC
9	24USD296	Skill Development Course	LIT	2-0-2	4	3	EEC
10	24UPD291	Personality and Character Development	PCD	-	2	-	EEC
11	24UMC002	Mandatory Course II – Emotional Balance and Mental Wellness	MC	1-0-0	1	-	MC
12	24UNC201	NCC Credit Course Level 1	NCC	-	-	1	-
Total Credits						25	

SEMESTER – III							
S. NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS /WEEK		CREDITS	CATE GORY
				L-T-P	TCP		
1	24UMA361	Algebra and Combinatorics	T	3-1-0	4	4	BSC
2	24UCS301	Design and Analysis of Algorithms	T	3-1-0	4	4	PCC
3	24UCS311	Data Structures	LIT	2-0-4	6	4	PCC
5	24UCS312	Object Oriented Programming	LIT	3-0-2	5	4	PCC
6	24UAD311	Foundations of Data Science	LIT	3-0-2	5	4	PCC
7	24UEC341	Digital Principles and Computer Organization	LIT	3-0-2	5	4	ESC
8		Skill Development Elective - I	L	0-0-4	4	2	EEC
9	24UPD391	Personality and Character Development	PCD	-	2	-	EEC
10	24UVC386	Value Added Course	VC	-	-	2	EEC
TOTAL CREDITS						26	

SEMESTER – IV							
S.NO	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS /WEEK		CREDITS	CATEG ORY
				L-T-P	TCP		
1	24UMA461	Probability and Number Theory	T	3-1-0	4	4	BSC
2	24UCS401	Theory of Computation	T	3-1-0	4	4	PCC
3	24UCS411	Artificial Intelligence and Machine Learning	LIT	3-0-2	5	4	PCC
4	24UCS412	Database Management Systems	LIT	3-0-2	5	4	PCC
5	24UCS414	Operating Systems	LIT	3-0-2	5	4	PCC
6		Career Progression Elective	T	3-0-0	3	3	EEC
7		Skill Development Elective - II	L	0-0-4	4	2	EEC
8	24UPD491	Personality and Character Development	PCD	-	2	-	EEC
9	24UCO492	Community Outreach And Intervention through Technical Activities	COT	-	1	1	EEC
10	24UVC486	Value Added Course	VC	-	-	2	EEC
11	24UNC401	NCC Credit Course Level 2	NCC	-	-	2	-
TOTAL CREDITS						26	

SEMESTER – V							
S. NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UHV501	Universal Human Values	T	2-0-0	2	2	HSMC
2	24UCS511	Computer Networks	LIT	3-0-2	5	4	PCC
3	24UCS512	Internet Programming	LIT	3-0-2	5	4	PCC
4	24UCY512	Cryptography and Cyber Security	LIT	3-0-2	5	4	PCC
5		Professional Elective I	T/LIT	-	-	3	PEC
6		Professional Elective II	T/LIT	-	-	3	PEC
7		Skill Development Elective - III	L	0-0-4	4	2	EEC
8	24UCS593	Industrial Training/ Internship	IT	-	-	1	EEC
9	24UPD591	Personality and Character Development	PCD	-	2	-	EEC
10	24UVC586	Value Added Course	VC	-	-	2	EEC
11		Mandatory Course III	MC	2-0-0	2	-	MC
TOTAL CREDITS						23	

SEMESTER – VI							
S. NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UCS611	Compiler Design	LIT	2-0-2	4	3	PCC
2	24UCB513	Object Oriented Software Engineering	LIT	2-0-2	4	3	PCC
3		Professional Elective III	T/LIT	-	-	3	PEC
4		Professional Elective IV	T/LIT	-	-	3	PEC
5		Professional Elective V	T/LIT	-	-	3	PEC
6		Open Elective – I	T/LIT	-	-	3	OEC
7		Skill Development Elective - IV	L	0-0-4	4	2	EEC
8	24UPD691	Personality and Character Development	PCD	-	2	-	EEC
9	24UCO692	Community Outreach And Intervention through Technical Activities	COT	-	-	2	EEC
10	24UVC686	Value Added Course	VC	-	-	2	EEC
11		Mandatory Course IV	MC	2-0-0	2	-	MC
12	24UNC601	NCC Credit Course Level 3	NCC	-	-	3	-
TOTAL CREDITS						22	

SEMESTER – VII							
S. NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UCS701	Software Project Management	T	2-0-0	2	2	HSMC
2	24UIT611	Cloud Computing	LIT	2-0-2	4	3	PCC
3		Open Elective – II	T/LIT	-	-	3	OEC
4	24UCS793	Industrial Training / Internship	IT	-	-	2	EEC
5	24UCS794	Comprehension Course	CC	2-0-0	2	2	EEC
6	24UCS795	Mini Project	PW	0-0-4	4	2	EEC
7	24UVC786	Value Added Course	VC	-	-	2	EEC
TOTAL CREDITS						14	

SEMESTER – VIII							
S. NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UCS895	Project Work	PW	0-0-20	20	10	EEC
TOTAL CREDITS						10	

MANDATORY COURSES

S.NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS /WEEK		CATEGORY
				L-T-P	TCP	
1	24UMC001	Yoga and Meditation	T	1-0-0	1	MC
2	24UMC002	Emotional Balance and Mental Wellness	T	1-0-0	1	MC
3	24UMC003	Ethical behavior and code of conduct for Engineers	T	2-0-0	2	MC
4	24UMC004	Disaster Management	T	2-0-0	2	MC
5	24UMC005	Indian Constitution and Knowledge System	T	2-0-0	2	MC
6	24UMC006	Ergonomics and Industrial Safety	T	2-0-0	2	MC
7	24UMC007	Introduction to Women and Gender Studies	T	2-0-0	2	MC

CAREER PROGRESSION ELECTIVE

S.NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS /WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1.	24UCPE11	Entrepreneurship Development	T	3-0-0	3	3	EEC
2.	24UCPE12	Research Methodology	T	3-0-0	3	3	EEC
3.	24UCPE13	Career Development Course	T	3-0-0	3	3	EEC

PROFESSIONAL ELECTIVE COURSES: VERTICALS

VERTICAL 1: FULL STACK DEVELOPMENT							
S.NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS /WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UCSP01	Web Development	LIT	2-0-2	4	3	PEC
2	24UCSP02	UI and UX Design	LIT	2-0-2	4	3	PEC
3	24UCSP03	Responsive Web Design	T	3-0-0	3	3	PEC
4	24UCSP04	Mobile Application Development	LIT	2-0-2	4	3	PEC
5	24UCSP05	Software Testing and Automation	LIT	2-0-2	4	3	PEC
6	24UCSP06	Agile Methodologies	T	3-0-0	3	3	PEC
7	24UCSP07	IOT Concepts and Applications	T	3-0-0	3	3	PEC
8	24UCSP08	Web Application Security	LIT	2-0-2	4	3	PEC

VERTICAL 2: CLOUD COMPUTING AND DATA CENTER TECHNOLOGIES							
S.NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS /WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UITP01	Cloud Computing and Virtualization	LIT	2-0-2	4	3	PEC
2	24UITP02	Cloud Services Management	LIT	2-0-2	4	3	PEC
3	24UITP03	Data Warehousing	LIT	2-0-2	4	3	PEC
4	24UITP04	Storage Technologies	LIT	2-0-2	4	3	PEC
5	24UITP05	Software Defined Networks	T	3-0-0	3	3	PEC
6	24UITP06	Security and Privacy in Cloud	LIT	2-0-2	4	3	PEC
7	24UITP07	Edge Computing and IoT	LIT	2-0-2	4	3	PEC
8	24UITP08	Serverless Computing	LIT	2-0-2	4	3	PEC

VERTICAL 3: DATA SCIENCE & ANALYTICS							
S.NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UCBP18	Predictive Analytics	T	3-0-0	3	3	PEC
2	24UCBP19	Recommender Systems	LIT	2-0-2	4	3	PEC
3	24UCBP20	Neural Networks and Deep Learning	T	3-0-0	3	3	PEC
4	24UCBP21	Image and Video Analytics	LIT	2-0-2	4	3	PEC
5	24UCBP22	Computer Vision	T	3-0-0	3	3	PEC
6	24UCBP23	DevOps and Software Deployment	LIT	2-0-2	4	3	PEC
7	24UCBP24	Business Intelligence	LIT	2-0-2	4	3	PEC
8	24UCBP25	Parallel and Distributed Computing	LIT	2-0-2	4	3	PEC

VERTICAL 4: INTELLIGENCE SYSTEMS & MACHINE LEARNING							
S.NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UAMP01	Knowledge Engineering	T	3-0-0	3	3	PEC
2	24UAMP02	Soft Computing	LIT	2-0-2	4	3	PEC
3	24UAMP03	Text and Speech Analysis	LIT	2-0-2	4	3	PEC
4	24UAMP04	Optimization Methods for ML Algorithms	T	3-0-0	3	3	PEC
5	24UAMP05	Game Theory	T	3-0-0	3	3	PEC
6	24UAMP06	Cognitive Science	T	3-0-0	3	3	PEC
7	24UAMP07	Reinforcement Learning	T	3-0-0	3	3	PEC
8	24UAMP08	Security in AI	T	3-0-0	3	3	PEC
9	24UAMP09	Ethical AI	T	3-0-0	3	3	PEC
10	24UCSP09	Evolutionary Computing	T	3-0-0	3	3	PEC

VERTICAL 5: INFORMATION SECURITY AND PRIVACY							
S.NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UCYP09	Introduction to Information Security	T	3-0-0	3	3	PEC
2	24UCYP10	Data Privacy and Protection	LIT	2-0-2	4	3	PEC
3	24UCYP11	Information Security Governance	T	3-0-0	3	3	PEC
4	24UCYP12	Access Control and Identity Management	T	3-0-0	3	3	PEC
5	24UCYP13	Security Auditing and Compliance	T	3-0-0	3	3	PEC
6	24UCYP14	Incident Response and Management	LIT	2-0-2	4	3	PEC
7	24UCYP15	Security and Privacy Engineering	T	3-0-0	3	3	PEC
8	24UCYP16	Ethical and Legal Issues in Information Security	T	3-0-0	3	3	PEC
9	24UCSP10	Ethical Hacking	T	3-0-0	3	3	PEC
10	24UCBP29	Quantum Computing	T	3-0-0	3	3	PEC

VERTICAL 6: MANAGEMENT							
S. NO.	COURSE CODE	COURSE NAME	COURSE TYPE	PERIODS / WEEK		CREDIT S	CATE GORY
				L-T-P	TCP		
1	24UCBP01	Customer Relation Management	T	3-0-0	3	3	HSMC
2	24UCBP02	Human Resource Management for Entrepreneurs	T	3-0-0	3	3	HSMC
3	24UCBP03	Supply Chain Management	T	3-0-0	3	3	HSMC
4	24UCBP04	IT Project Management	LIT	2-0-2	4	3	HSMC
5	24UCBP05	Behavioral Economics	T	3-0-0	3	3	HSMC
6	24UCBP06	E-Commerce	T	3-0-0	3	3	HSMC
7	24UCBP07	Enterprise Resource Planning	T	3-0-0	3	3	HSMC
8	24UCBP08	Financial Technology Innovations	T	3-0-0	3	3	HSMC

OPEN ELECTIVES

B. TECH. ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

S.NO.	COURSECODE	COURSE TITLE	COURSE TYPE	PERIODS /WEEK		CREDITS
				L-T-P	TCP	
1	24UADO01	Introduction to Artificial Intelligence and Machine Learning	T	3-0-0	3	3
2	24UADO02	Introduction to Data Science	T	3-0-0	3	3
3	24UADO03	Introduction to Big Data Analytics	T	3-0-0	3	3
4	24UADO04	Data Visualization Techniques	T	3-0-0	3	3
5	24UADO05	Introduction to Devops Tools	T	3-0-0	3	3
6	24UADO06	Fundamentals of Storage Technologies	T	3-0-0	3	3
7	24UADO07	Basics of Cloud Services	T	3-0-0	3	3

B.E. CSE (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)

S.NO.	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS /WEEK		CREDITS
				L-T-P	TCP	
1	24UAMO01	Fundamentals of Artificial Intelligence	T	3-0-0	3	3
2	24UAMO02	Principles of Machine Learning	T	3-0-0	3	3
3	24UAMO03	Fundamentals of Deep Learning	LIT	2-0-2	4	3
4	24UAMO04	Virtualization and Container Technologies	LIT	2-0-2	4	3
5	24UAMO05	Python Frameworks for Web Applications	LIT	2-0-2	4	3
6	24UAMO06	Fundamentals of Natural Language Processing	T	3-0-0	3	3
7	24UAMO07	AI for Mechanical Engineering	T	3-0-0	3	3
8	24UAMO08	AI for food processing	T	3-0-0	3	3
9	24UAMO09	AI for Game Development	T	3-0-0	3	3

B. TECH. COMPUTER SCIENCE AND BUSINESS SYSTEMS

S.NO.	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS
				L-T-P	TCP	
1.	24UCBO01	Modern Web Applications	T	3-0-0	3	3
2.	24UCBO02	Applied Design Thinking	T	3-0-0	3	3
3.	24UCBO03	Human Computer Interaction	T	3-0-0	3	3
4.	24UCBO04	Social Information Network	T	3-0-0	3	3
5.	24UCBO05	Artificial Intelligence and Expert Systems	T	3-0-0	3	3
6.	24UCBO06	Usability Design of Software Applications	T	3-0-0	3	3
7.	24UCBO07	Data Mining and Analytics	T	3-0-0	3	3

B.E. COMPUTER SCIENCE AND ENGINEERING (CYBER SECURITY)

S.NO.	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS /WEEK		CREDITS
				L-T-P	TCP	
1.	24UCYO01	Cybersecurity Fundamentals	T	3-0-0	3	3
2.	24UCYO02	Information Security Management	T	3-0-0	3	3
3.	24UCYO03	Incident Response and Forensics	T	3-0-0	3	3
4.	24UCYO04	Cyber Law and Ethics	T	3-0-0	3	3
5.	24UCYO05	Security Operations	T	3-0-0	3	3
6.	24UCYO06	Introduction to Open Source Intelligence.	T	3-0-0	3	3

B.E. ELECTRONICS AND COMMUNICATION ENGINEERING

S.NO.	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS /WEEK		CREDITS
				L-T-P	TCP	
1	24UECO01	Remote Sensing Concepts	T	3-0-0	3	3
2	24UECO02	Sensors and Actuators	T	3-0-0	3	3
3	24UECO03	Concepts in Mobile Robots	T	3-0-0	3	3
4	24UECO04	Drone Technologies	T	3-0-0	3	3
5	24UECO05	Geographical Information System	T	3-0-0	3	3
6	24UECO06	Introduction to Embedded C	LIT	2-0-2	4	3

7	24UECO07	Fundamentals of Microprocessors and Microcontrollers	LIT	2-0-2	4	3
8	24UECO08	Energy Storing Devices	T	3-0-0	3	3
9	24UECO09	Semiconductor and Devices	T	3-0-0	3	3

B.Tech. INFORMATION TECHNOLOGY

S.NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS/ WEEK		CREDITS
				L-T-P	TCP	
1.	24UITO01	Functional Programming	T	3-0-0	3	3
2.	24UITO02	Fundamentals of Cryptography	T	3-0-0	3	3
3.	24UITO03	Software Engineering	T	3-0-0	3	3
4.	24UITO04	Concepts of Object Oriented Programming	LIT	2-0-2	4	3
5.	24UITO05	Fundamentals of Computer Vision	T	3-0-0	3	3
6.	24UITO06	Foundations of Block chain	T	3-0-0	3	3
7.	24UITO07	Game Theory and Mechanism Design	T	3-0-0	3	3

B.E. MECHANICAL ENGINEERING

S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS
				L-T-P	TCP	
1	24UMEO01	Fundamentals of Additive Manufacturing	T	3-0-0	3	3
2	24UMEO02	Renewable Energy Systems	T	3-0-0	3	3
3	24UMEO03	Principles of Safety Management	T	3-0-0	3	3
4	24UMEO04	Introduction to Mechatronics Systems	T	3-0-0	3	3
5	24UMEO05	Product Design and Development	T	3-0-0	3	3
6	24UMEO06	Fundamentals of Electrical Vehicle Technology	T	3-0-0	3	3

Guidelines for choosing Courses under PEC

	PEC- I	PEC- II		PEC- III	PEC- IV	PEC- V
	FSD	IS&ML	DS	ISP	CC	MGMT
Cluster A	24UCSP01 Web Development	24UAMP01 Knowledge Engineering	24UCBP22 Computer Vision	24UCYP09 Introduction to Information Security	24UITP01 Cloud Computing and Virtualization	24UCBP01 Customer Relation Management
	24UCSP02	24UAMP06 Cognitive Science	24UCBP21 Image and	24UCYP12 Access Control	24UITP02 Cloud Services Management	24UCBP03 Supply Chain Management

	UI and UX Design		Video Analytics	and Identity Management		
	24UCSP03 Responsive Web Design			24UCYP10 Data Privacy and Protection	24UITP06 Security and Privacy in Cloud	24UCBP06 E-Commerce
	24UCSP08 Web Application Security			24UCYP14 Incident Response and Management	24UITP08 Serverless Computing	
					24UITP04 Storage Technologies	
Cluster B	24UCSP04 Mobile Application Development	24UAMP02 Soft Computing	24UCBP24 Business Intelligence	24UCYP15 Security and Privacy Engineering	24UITP05 Software Defined Networks	24UCBP07 Enterprise Resource Planning
		24UAMP03 Text and Speech Analysis	24UCBP18 Predictive Analytics	24UCYP13 Security Auditing and Compliance		24UCBP08 Financial Technology Innovations
		24UAMP04 Optimization Methods for ML Algorithms	24UCBP19 Recommender Systems	24UCYP11 Information Security Governance		
		24UAMP05 Game Theory		24UCYP16 Ethical and Legal Issues in Information Security		
Cluster C	24UCSP06 Agile Methodologies	24UAMP08 Security in AI	24UCBP23 DevOps and Software Deployment	24UCSP10 Ethical Hacking	24UITP07 Edge Computing and IoT	24UCBP02 Human Resource Management for Entrepreneurs
	24UCSP05 Software Testing and Automation	24UAMP09 Ethical AI				24UCBP05 Behavioral Economics
Cluster D	24UCSP07 IOT Concepts and Applications	24UCSP09 Evolutionary Computing	24UCBP25 Parallel and Distributed Computing	24UCBP29 Quantum Computing	24UITP03 Data Warehousing	24UCBP04 IT Project Management
Cluster E		24UAMP07 Reinforcement Learning	24UCBP20 Neural Networks and Deep Learning			
	24UCS311 Data Structures	24UCS411 Artificial Intelligence and	24UAD311 Foundations of Data Science	24UCS511 Computer Networks	24UCS414 Operating Systems	

Pre-requisite Courses		Machine Learning				
	24UCS312 Object Oriented Programming			24UCY512 Cryptography and Cyber Security		
	24UCS412 Database Management Systems					

Criteria for Choosing Courses for Professional Electives

PEC – I : Avoid taking 24UCSP01 Web Development. Any other course from any cluster is fine

PEC - II: Can be from Data science / IS & ML. Any course from any cluster is fine

PEC - III: Any course from any cluster is fine

PEC - IV: Since the students are studying “24UIT611Cloud Computing” course in VII semester, it is better to choose a course from Clusters B, C or D

PEC - V: Better to choose “24UCBP08 Financial Technology Innovations”. Any other course is also fine.

*** It is better to choose Courses from a Cluster in the prescribed order**

Open elective - Course Preferences List

S.No	Departments	Course Preference
1	AI & DS	24UADO03, 24UADO04
2	AI & ML	24UAMO03, 24UAMO04, 24UAMO05, 24UAMO06, 24UAMO08. 24UAMO09
3	CSBS	24UCBO02, 24UCBO03, 24UCBO04, 24UCBO07
4	CYS	24UCYO03, 24UCYO04, 24UCYO05, 24UCYO06
5	ECE	24UECO01 to 24UECO08
6	IT	24UITO06

7	Mechanical	24UMEO02, 24UMEO06
---	------------	-----------------------